



The goal of these hands-on exercises is to reinforce the concepts taught in the online tutorial, using simple examples, and to familiarize users with our website so they will know where to find each of the products. For each exercise, please follow along, starting from the main page of the NOAA Coral Reef Watch (CRW) website: <http://coralreefwatch.noaa.gov/satellite/>.

### **Satellite Bleaching Alert (SBA) product exercise**

**9.** What was the highest alert level for the Virtual Stations in the U.S. Virgin Islands and Bermuda in 2005? Based on these alerts, was bleaching predicted at these two locations?

- a. Return to CRW's 50-km homepage ([http://coralreefwatch.noaa.gov/satellite/index\\_50.php](http://coralreefwatch.noaa.gov/satellite/index_50.php)) and navigate to the **US Virgin Islands** Virtual Station.
- b. On the time series graph for 2004-05, look through the alerts that were issued during 2005. What was the highest alert level? Would bleaching have been predicted at this station? (*#9 on the answer sheet*)
- c. Go back one page to the Virtual Stations list. Locate **Bermuda**. On the time series graph for 2004-05, look through the alerts that were issued during 2005. What was the highest alert level? Would bleaching have been predicted at this station? (*#9 on the answer sheet*)

## SATELLITE BLEACHING ALERT PRODUCT ANSWER SHEET

**9.** In the US Virgin Islands, a **Bleaching Alert Level 2** was issued for DHWs over 8 °C-weeks in 2005. Widespread bleaching and some coral mortality would therefore be expected for this Virtual Station. For the Bermuda Virtual Station, the highest alert issued was a **Bleaching Warning**. That means that satellite DHWs never exceeded 4 °C-weeks, and significant bleaching was therefore not expected. In fact, local field observations of coral reefs in the US Virgin Islands indicated that coral bleaching was very severe during 2005, with 40% mortality in some reef locations. On the other hand, local managers and scientists in Bermuda saw little to no bleaching during that same period, due to much lower levels of thermal stress.